

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES



Appellants : John C. HARVEY and
James W. Cuddihy

Serial No. : 08/470,571

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For : SIGNAL PROCESSING APPARATUS AND METHODS

Group Art Unit : 2614

Examiner : David Louis Ometz

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REPLY BRIEF

This reply brief is filed in accordance with 37 C.F.R. § 41.41 in response to the Examiner's Answer mailed June 27, 2006. Any fees that may be due but are not attached may be charged to Deposit Account No. 06-1075.

Related Appeals and Interferences

The list of appeals and judicial proceedings involving applicants' related applications and patents in the substitute appeal brief is supplemented to take into account subsequent activities as follows.

In the pending appeal of merged Reexamination Control Nos. 90/006,697 and 90/006,841 regarding related U.S. Pat. No. 4,704,725, a Reply Brief was filed June 21, 2006, in response to an Examiner's Answer mailed April 21, 2006.

In merged Reexamination Control Nos. 90/006,606; 90/006,703 and 90/006,839 regarding related U.S. Pat. No. 5,233,654, an appeal was noticed on May 30, 2006.

It merged Reexamination Control Nos. 90/006,563 and 90/006,698 regarding related U.S. Pat. No. 5,335,277, an appeal was noticed on June 16, 2006.

In the pending appeal of copending Application No. 08/487,526, the Examiner noted the Reply Brief on June 23 2006.

Status Of Claims

Claims 56-58, 60-63, 65-74, 80, 81, 84, 85, 87, 89-91, 93-95, 98, 100, 102, 103, 106-109, and 183-197 are pending and stand rejected. The rejections of each of these claims are appealed. Claims 1-55, 59, 64, 75-79, 82, 83, 86, 88, 92, 96, 97, 99, 101, 104, 105, and 110-182 have been cancelled.

Grounds Of Rejection To Be Reviewed On Appeal

The following rejections, presented in the Final Office Action mailed April 28, 2004, and not subsequently withdrawn, are to be reviewed on appeal:

- The rejection of claims 56, 80, and 84 (and all claims depending therefrom) under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which appellants regard as the invention.
- The rejection of claims 56-58, 60-63, 65-72, 74, 93-95, 100, 102, 103, 106-109, 187-189, and 191-197 under 35 U.S.C. § 102(b) as being anticipated by Japanese published application no. 55-028691.
- The rejection of claim 73 under 35 U.S.C. § 103(a) as being unpatentable over Japanese published application no. 55-028691 in view of U.S. Patent 2,757,226.
- The rejection of claims 56-58, 60-63, 65, 66, 73, 89-91, 93-95, 98, 100, 102, 103, 106-109, and 187-197 under 35 U.S.C. § 103(a) as being unpatentable over “Telesoftware - Value Added Teletext” by J. Hedger *et al.* in view of “The Use of MicroCobol for Telesoftware” by E. C. Sedman and further in view of either British Patent 1 405 141 or U.S. Patent 4,218,698.
- The rejection of claims 56-58, 60-63, 65-74, and 89-91 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 4,253,157 in view of U.S. Patent 4,218,698.
- The rejection of claims 93-95, 98, 100, 103, 106-108, 187, 195, and 196 under 35 U.S.C. § 103(a) as being unpatentable over British Patent 1 556 366 in view of U.S. Patent 4,218,698.
- The rejection of claims 93-95, 98, 100, 103, 106-108, 187-191, and 193-196 under 35 U.S.C. § 103(a) as being unpatentable over “Teletext Receiver LSI Data

Acquisition and Control” by G.O. Crowther *et al.* in view of U.S. Patent 4,218,698.

- The rejection of claims 80, 81, 84, 85, 87, 183-191, and 193-196 under 35 U.S.C. § 103(a) as being unpatentable over British Patent 1 370 535 in view of U.S. Patent 4,290,062.
- The rejection of claims 188-191, 193, and 194 under 35 U.S.C. § 103(a) as being unpatentable over British Patent 1 556 366 in view of U.S. Patent 4,218,698 and further in view of “Teletext Receiver LSI Data Acquisition and Control” by G.O. Crowther *et al.*
- The rejection of claims 102, 109, 192, and 197 under 35 U.S.C. § 103(a) as being unpatentable over British Patent 1 556 366 in view of U.S. Patent 4,218,698 and further in view of Japanese published application no. 55-028691.
- The rejection of claims 80 and 81 under 35 U.S.C. § 103(a) as being unpatentable over German Patent 23 56 969 in view of British Patent 959,274 and further in view of “CEEFAX - The Generation, Distribution and Transmission of a National Teletext Service” by J. P. Chambers.
- The rejection of claim 80 under 35 U.S.C. § 103(a) as being unpatentable over “The Automation of Small Television Stations” by George Young *et al.* in view of “Microprocessor for CATV Systems” by E.O. Tunmann *et al.* and further in view of U.S. Patent 4,218,698.
- The rejection of claims 56-58, 60-63, 65-74, 89-91, 93-95, 98, 100, 102, and 187-197 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 9-13 of U.S. Patent No. 4,694,490.

The following grounds of rejection are no longer presented for review on appeal because they were withdrawn by the Examiner in the Examiner's Answer:

- The rejection of claim 93 under 35 U.S.C. § 103(a) as being unpatentable over “Development & Applications of the Antiope-Didon Technology” by J. Guillermin in view of “Antiope Teletext Captioning” by Claude Sechet and further in view of the “CBS/CCETT North American Broadcast Teletext Specification (Extended Antiope).”
- The rejection of claims 84, 94, 95, 98, 100, 107, 108, and 187 under 35 U.S.C. § 103(a) as being unpatentable over “Antiope Teletext Captioning” by Claude Sechet in view of the “CBS/CCETT North American Broadcast Teletext Specification (Extended Antiope).”
- The rejection of claim 80 under 35 U.S.C. § 103(a) as being unpatentable over “The Automation of Small Television Stations” by George Young *et al.* in view of “Microprocessor for CATV Systems” by E.O. Tunmann *et al.* and further in view of the “CBS/CCETT North American Broadcast Teletext Specification (Extended Antiope).”
- The rejection of claims 80 and 81 under 35 U.S.C. § 103(a) as being unpatentable over “The Automation of Small Television Stations” by George Young *et al.* in view of the “CBS/CCETT North American Broadcast Teletext Specification (Extended Antiope).”
- The rejection of claims 84, 85, 184, and 185 under 35 U.S.C. § 103(a) as being unpatentable over the “CBS/CCETT North American Broadcast Teletext Specification (Extended Antiope).”

Argument

1. Introduction

Each pending claim was rejected in the Final Office Action mailed April 28, 2004. Appellants filed a response to the Final Office Action on September 20, 2004, pointing out the errors in the grounds of rejection asserted against the pending claims. The Office mailed an extensive Advisory Action on November 24, 2004, and mailed a revised Advisory Action on December 20, 2004. Appellants filed an Appeal Brief on February 8, 2005. The Office mailed an Examiner's Answer on October 6, 2005. Appellants filed a Reply Brief on December 6, 2006. On April 11, 2006, the Board issued an Order Returning Undocketed Appeal to the Examiner. The Order states, *inter alia*: "It is required on that a substitute Appeal Brief be submitted that is in compliance with 37 C.F.R. § 41.37(c)." On April 21, 2006, the Office mailed a Notification on Non-Compliant Appeal Brief. Appellants submitted a Substitute Appeal Brief on May 1, 2006. ("Appeal Brief" hereinafter refers to this Substitute Appeal Brief.) The Office mailed a new Examiner's Answer on June 27, 2006. ("Examiner's Answer" hereinafter refers to the June 27, 2006, Examiner's Answer.) This Reply Brief is responsive to the Examiner's Answer.

Appellants' Appeal Brief identifies significant errors in the grounds of rejection presented in the Final Office Action. Most notably, appellants demonstrated that the Examiner employs unreasonably broad claim interpretations in order to equate the claimed invention with references that are acknowledged to be different from the inventors' disclosed invention. The Examiner's Answer does not address the errors highlighted by the Appeal Brief and, accordingly, fails to present sufficient grounds to sustain the rejections of the pending claims.

The examiner's answer is required to include, under appropriate headings, in the order indicated, the following items:

....

(10) *Response to Argument*. A statement of whether the examiner disagrees with each of the contentions of appellant in the brief with

respect to the issues presented and an explanation of reasons for disagreement with any such contention. The examiner must use headings and subheadings paralleling the heading and subheadings utilized in the appellant's brief.

M.P.E.P. § 1207.02 (8th Ed., Rev. 3, 2005). The Examiner's Answer does not include a "Response to Argument" section. The "Grounds of Rejection" section in the Examiner's Answer is primarily a regurgitation, usually in the same words, of the rejections set forth in the Final Office Action. The Examiner's Answer, thus, does little to clarify the Examiner's position regarding the issues in dispute. Accordingly, the arguments presented in the Appeal Brief remain sufficient to demonstrate that the rejections presented in the Final Office Action include errors that warrant their reversal. This Reply Brief addresses the new arguments included in the Examiner's Answer.

2. The Claims Comply With The Requirements Of The Second Paragraph Of 35 U.S.C. § 112

A. Term "Locally Generate" Is Definite

In Section E2 (I) of the Final Office Action, the Examiner rejects claims 56, 80, 84, and all claims depending therefrom under 35 U.S.C. § 112, second paragraph, as being indefinite. Specifically, the Examiner rejects appellants' use of the term "locally generated." This rejection is repeated in Section R1 of the Examiner's Answer.

The examiner's answer is required to include, under appropriate headings, in the order indicated, the following items:

....

(9) *Grounds of Rejection.* For each ground of rejection maintained by the examiner . . . , an explanation of the ground of rejection.

....

(b) For each rejection under 35 U.S.C. 112, second paragraph, the examiner's answer must explain how the claims do not particularly point out and distinctly claim the subject matter which applicant regards as the invention.

M.P.E.P. § 1207.02. The Examiner's Answer does not explain how claims 56, 80 or 84 do not particularly point out and distinctly claim the subject matter which applicants regard as the invention. This rejection is improper for the reasons set forth in appellants' Appeal Brief.

The Examiner attempts to convert a dispute over whether the prior art anticipates or suggests appellants' invention as claimed into an issue of indefiniteness under the second paragraph of Section 112. The Examiner asserts:

The "problem" is that applicant continues to argue that the "locally generated" image terminology of the claims distinguishes that which is claimed over applied teletext prior art because, so it is argued, "teletext images are not locally generated images."

(Examiner's Answer, p. 15.) It is telling that the Examiner provides no citation for the quotation "teletext images are not locally generated images." It is not from appellants' Appeal Brief. The Examiner over simplifies appellants' position. Appellants' position is fully set forth in Section 3 of the arguments presented in the Appeal Brief. In summary, appellants' position is that the term "locally generated" is used in the art both in reference to teletext systems and to distinguish teletext systems. Accordingly, the meaning of the term must be derived from its context.

That the meaning of a term is dependent on its context is not sufficient grounds to maintain a rejection under the second paragraph of Section 112. The Examiner cites to various extrinsic references in an attempt to show that term "locally generated" is properly applied to teletext images. (Examiner's Answer, pp. 13-14.) Appellants demonstrate that the term "locally generated" is also used in the patent literature to distinguish teletext systems and further explain how one of ordinary skill in the art would interpret "locally generated" in the context of appellants' specification and claims. (Appeal Brief, pp. 24-25.) The Examiner asserts, "the meaning of the terminology has become unclear given the record that supports it." (Examiner's Answer, p. 15.) To the contrary, the support in the record for the term "locally generated" is clear. It is only the Examiner's attempt to import the meaning of the term from extrinsic contexts that diminishes the clarity of the term.

Appellants set forth the requirements of a proper rejection under the second paragraph of Section 112 at pages 13-14 of the Appeal Brief. “The essential inquiry pertaining to this requirement is whether the claims set out and circumscribe a particular subject matter with a reasonable degree of clarity and particularity.” M.P.E.P. § 2173.02. It remains that the Examiner has not alleged, let alone established, that the claim term “locally generated” precludes one of ordinary skill in the art from ascertaining with a reasonable degree of clarity and particularity the claimed subject matter.

The Examiner notes that appellants argue that the term “locally generated” should be read to mean: “brought into existence at a particular location.” (Examiner’s Answer, p. 15.) The Examiner does not argue that such a meaning is indefinite. Rather, the Examiner argues that such a meaning is insufficient to render the claims patentable over teletext. (Examiner’s Answer, pp. 15-17.) This argument does not support the rejection of claims 56, 80, and 84 under the second paragraph of Section 112.

The Examiner’s Answer does not explain how claims 56, 80, and 84 (and claims 57, 58, 60-63, 65-74, 81, 85, 87, 89-91, and 183-186 depending therefrom) do not particularly point out and distinctly claim the subject matter which appellants regard as the invention. To the contrary, the Examiner’s Answer merely reiterates that the Examiner believes that the claimed subject matter is unpatentable over teletext. The fact that appellants disagree and base their arguments on the claim language is not a basis to conclude that the claims are indefinite. The rejection under 35 U.S.C. § 112, second paragraph based on the term “locally generated” should be reversed for the reasons set forth in appellants’ Appeal Brief.

B. Functional Descriptions Are Not Indefinite

In Sections E2 (II) and (III) of the Final Office Action, the Examiner rejects claims 80, 84, and the claims dependent therefrom as being “indefinite and confusing” because it is not clear whether certain functional descriptions set forth in the claims are part of the recited method or whether the functional descriptions should be treated merely as descriptions of intended use.

The Examiner asserts that clarification is required. These rejections are repeated verbatim in Sections R1 B. and C. of the Examiner's Answer with no further arguments despite appellants repeatedly having provided the clarification requested.

Appellants note that the Examiner asserted this rejection with respect to claims 80 and 84 in the Office action mailed July 17, 2002 and appellants fully responded in the Amendment And Request For Reconsideration filed January 9, 2003 at page 85. The Examiner did not acknowledge appellants' response to this issue, but repeated the rejection in the Final Office Action. Appellants again presented their position at pages 18-19 of the Response filed September 20, 2004. The Advisory Action did not acknowledge appellants' response to this issue. Appellants' position is repeated in Section 2. B. of the Argument presented in the Appeal Brief. The Examiner again has not acknowledged appellants' contentions, but repeats the rejection in the Examiner's Answer.

Appellants have repeatedly noted that "[t]here is nothing inherently wrong with defining some part of an invention in functional terms. Functional language does not, in and of itself, render a claim improper." M.P.E.P. § 2173.05(g) (citing *In re Swinehart*, 439 F.2d 210, 169 U.S.P.Q. 226 (C.C.P.A. 1971)). The Examiner's Answer does not indicate whether the Examiner disagrees with this contention. As functional language does not render a claim indefinite, the Examiner's Answer fails to explain how claims 80 and 84 do not particularly point out and distinctly claim the subject matter which applicants regard as the invention. The Examiner has failed to set forth a proper rejection under the second paragraph of § 112 against claims 80 and 84 for the reasons set forth in the Appeal Brief. Appellants respectfully request that the rejections under 35 U.S.C. § 112 be reversed.

3. Issues Of Claim Interpretation

The Examiner's Answer recognizes that a key issue with respect to the rejections under 35 U.S.C. §§ 102 and 103 (the "art rejections") is the disagreement between the Examiner and appellants over the proper interpretation of the terms "locally generated" and "user specific" in

the rejected claims. (Examiner's Answer p. 3.) Section 3 of the Argument in appellants' Appeal Brief sets forth appellants' contentions regarding the proper construction of the claim terms "user specific data," "locally generated," and "organize." The Examiner's Answer does not directly address appellants' contentions regarding these terms. The Examiner provides no explicit interpretations of these terms that he considers key with respect to the art rejections.

At pages 16-18 of the Appeal Brief, appellants set forth a brief history of the prosecution of the subject matter set forth in the rejected claims. Appellants noted that one embodiment of the claimed subject matter disclosed in the specification is the presentation of broadcast information (e.g., a graph of general stock market performance) integrated with personalized content generated by local processing using data specific to the user (e.g., a graph of the user's specific portfolio performance). Appellants asserted that conventional prior art teletext references do not teach or suggest this type of presentation.

The Examiner's Answer does not take issue with appellants' contention that conventional prior art teletext references do not teach or suggest the type of presentation invented and disclosed by applicants. Indeed, Section I. 4. of the Grounds of Rejection in the Examiner's Answer acknowledges that the disclosed invention is different from teletext. The Appeal Brief in Section 3 sets forth how the claim terms "locally generated" and "user specific data" are used in the claims to define the invention in a way that distinguishes the applied teletext references from the disclosed invention. However, the Examiner continues to summarily dismiss appellants' arguments regarding the proper construction of the terms "user specific" and "locally generated." For example, with respect to the term "user specific" the Examiner states:

The examiner maintains that the data inputted at the receiving station by a user to identify the page of teletext data that he/she desires, i.e. the data representing the specific page request of a specific user, is "user specific data" given the broadest reasonable interpretation of the terminology.

(Examiner's Answer, p. 21.) However, the Examiner provides no support whatsoever for this assertion. The Examiner does not set forth what the broadest reasonable interpretation of the

term “user specific data” is. Without interpreting the meaning of the term “user specific data,” the Examiner concludes that page requests entered in conventional teletext systems are “user specific data.” *Id.* There is no support for the Examiner’s conclusion.

Appellants argued that the Examiner’s conclusion reads all meaning out of the term “user specific data” by reading the term on any receiver side input. (Appeal Brief, p. 17.) It is unclear whether or not the Examiner disagrees with appellants’ contention. The Examiner’s Answer does not address this contention. Rather, “the examiner [sic] position concerning [the] disputed terminology, as well as the others set forth in part 3 of the Brief, are addressed in the latest Advisory action.” (Examiner’s Answer, p. 21., *see also* Examiner’s Answer, p. 20.) It should be noted, however, that appellants prepared and filed the Appeal Brief after receiving the latest Advisory Action. Accordingly, the Appeal Brief addresses the Examiner’s position concerning the disputed terminology as addressed in the latest Advisory Action. The Examiner’s position is unreasonable for the reasons set forth in the Appeal Brief.

The Examiner’s Answer asserts that these issues of claim terminology are best addressed by considering the rejection of claim 187 based on the article entitled “Teletext Receiver LSI Data Acquisition and Control” by G.O. Crowther *et al.* (“Crowther”). (Examiner’s Answer, pp. 3-4.) The Examiner’s Answer includes as Section I of the Grounds of Rejection a discussion of the application of Crowther against claim 187. However, the grounds of rejection included in the Final Office Action do not include a rejection of claim 187 based solely on Crowther. Rather, claim 187 stands rejected under 35 U.S.C. § 103 as being unpatentable over Crowther in view of U.S. Patent 4,218,968 to Bart *et al.* It is acknowledged in this rejection that Crowther does not teach each limitation of claim 187. (Final Office Action, Section E-18; Examiner’s Answer, Section R2.) Notwithstanding, Crowther does not anticipate or suggest the invention set forth by claim 187 for the reasons set forth below. Appellants contend that, when the terms of claim 187 are given reasonable interpretations, the claimed subject matter is clearly distinguished from the teachings of Crowther.

A. Proper Interpretation Of “User Specific Data”

Appellants set forth in Section 3.A. of the Argument in the Appeal Brief the proper procedure for interpreting claim terms as set forth by the controlling authorities and Office procedures. PMC, the real party in interest, has made consistent arguments regarding the proper construction of the term “user specific” before the Atlanta Court regarding its issued patents and before the Office regarding its pending applications. The Atlanta Court has ruled on this issue of claim construction. The Atlanta Court gives the term “user specific” its plain meaning: “‘User specific signals’ are signals that are specific to a user/subscriber, *i.e.* signals that relate to a particular user/subscriber.” Special Master’s Report and Recommendation on Claim Construction, p. 132 (submitted with the Appeal Brief in the Related Proceeding Appendix). Appellants assert that it is appropriate to adopt the construction adopted by the Atlanta Court. Accordingly, appellants submit that “user specific data” should properly be interpreted to mean “data that are specific to a user, *i.e.* data that relate to a particular user.” This construction is similar to the construction presented in the Appeal Brief. Appellants, in the Appeal Brief, explained that the applied teletext references do not teach or suggest data that relate to a particular user.

The U.S. Circuit Court for the Federal Circuit has addressed the extent to which the specification should be relied upon in seeking to ascertain the proper scope of the claims in *Phillips v. AWH Corp.* 415 F.3d 1303, 75 U.S.P.Q.2d 1321 (2005). Section 2111 of the Manual of Patent Examining Procedure as updated takes into account the *Phillips* decision. The M.P.E.P. sets forth: “During patent examination, the pending claims must be ‘given their broadest *reasonable* interpretation consistent with the specification.’” M.P.E.P. § 2111 (quoting *In re Hyatt*, 211 F.3d 1367, 1372, 54 U.S.P.Q.2d 1664, 1667 (Fed. Cir. 2000)) (emphasis added); *In re Bigio*, 381 F.3d 1320, 1324, 72 U.S.P.Q.2d 1209, 1210-11 (Fed. Cir. 2004). This continues to mean that the words of the claim must be given their plain meaning unless applicants have provided a clear definition in the specification. M.P.E.P. § 2111.01; *Chef America, Inc. v. Lamb-Weston, Inc.*, 358 F.3d 1371, 1372, 69 U.S.P.Q.2d 1857 (Fed. Cir. 2004). The Court in *Phillips*

sets forth that “the ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” 415 F.3d at 1313, 75 U.S.P.Q.2d at 1326. “Importantly, the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.” *Id.*

The Examiner argues that the disputed claim terms are best understood in the context of claim 187. (Examiner’s Answer, p. 3.) Claim 187 is directed to a method of outputting a video presentation at a receiver station. Claim 187 includes a steps of *generating an image by processing at least one user specific subscriber datum and outputting said video presentation . . . , said video presentation comprising, firstly, a video image and, secondly, a coordinated display using said generated image and said video image.* The specification describes outputting the television program “Wall Street Week” in accordance with the invention. The specification describes generating a graphic image of the performance of a user’s stock portfolio. (Spec. p. 24, ll. 22-27.) The generation is accomplished by processing the user’s portfolio data file. (Spec. p. 21, ll. 5-14; p. 24, ll. 22-27.) The “Wall Street Week” television program is output at the user’s receiver station. (Spec. p. 25, ll. 23-25.) As the host refers to the Dow Jones Industrials, a studio generated graphic is output. (Spec. p. 25, ll. 28-33.) The host then says, “And here is what your portfolio did.” (Spec. p. 25, ll. 33-34.) The invention then presents the generated graphic image overlaid on the received video to produce a graph showing the user his own performance information as it relates to the performance information of the market as a whole. (Spec. p. 26, ll. 4-19.) One of ordinary skill in the art would recognize that a user’s portfolio data file relates to the *particular* user. In the context of the specification, one of ordinary skill in the art would recognize that a “user specific subscriber datum” is a datum that relates to a *particular* user.

The specification uses the term “user specific” to mean relating to a particular user.

It is [a] purpose of this invention to provide means and methods whereby a simplex point-to-multipoint transmission (such a television or radio broadcast) can cause simultaneous generation of user specific information at a plurality of subscriber stations. One

advantage of the present invention is great ease of use. For example, as will be seen, a subscriber can cause his own information to be processed in highly complex ways by merely turning his television receiver on and tuning to a particular channel. (Spec. p. 11, ll. 23-31.)

In actuality, the process of controlling computer-based combined media operations is continuous and involves systematic inputting and maintaining of up-to-date user specific data at each subscriber station. For example, only at subscriber stations where user specific stock data is maintained systematically and up-to-date can the program instruction set of the first message of the "Wall Street Week" example generate Fig. 1A images that actually show the performance of the portfolios of the subscribers of said stations. (Spec. p. 448, ll. 4-13.)

In the context of the claims and the specification, the term "user specific" is used to refer to something that relates to a *particular* user.

"[T]he examiner takes the position that the act of specifying a selection via the entry of data into a system by a user, makes the data entered by the user 'user specific' data because, if for nothing else, the entered data relates/pertains to the specific user that entered it."

(Examiner's Answer, p. 22.) The Examiner in effect argues that "user specific" encompasses "user supplied." The Examiner provides no reasoning or analysis to support this position. The Examiner's position is incorrect. Although user supplied data may be related to a particular user (such as data supplied by a user regarding the particular stock portfolio of the user), user supplied data is not necessarily related to a *particular* user (such as a user supplied channel selection that is made by a multitude of users who wish to view a broadcast program).

Accordingly, user supplied data may or may not be user specific data. The Examiner's position that user supplied data must be user specific data is unreasonable as it is not consistent with the context of the claims and the specification in which data does relate to a *particular* user.

It is, thus, not sufficient for the Examiner to merely assert that teletext systems process user supplied information in order to show or suggest "user specific data." In order to properly support a rejection, the applied art must show that the user supplied information relied upon to teach or suggest "user specific data" relates to a *particular* user. The Examiner frequently relies

on the input of teletext page numbers to show user supplied data. However, the Examiner does not identify anything about user supplied teletext page numbers that relates to a *particular* user. To the contrary, teletext page numbers are typically selected from a menu of choices provided generally to all users. Each user that wishes to view a teletext page enters the same page number as every other user that wishes view that page. Accordingly, such page numbers cannot be said to relate to a *particular* user.

Furthermore, in the context of the claim language, it is unreasonable to interpret “user specific” to encompass “user supplied.” The claims are explicit when referring to user supplied data. For example, claim 187, in addition to reciting a “user specific subscriber datum,” recites *information supplied by a user of said receiver station*. It is thus clear that the claims do not equate “user specific” with “user supplied.” From the context of the claim itself, “user specific” must mean something more than “user supplied.”

It is also unreasonable to interpret “user specific” to encompass “user supplied” in the context of the specification. The proper context of the term “user specific” can be found on the first page of the specification.

But television, radio, and broadcast print are only mass media. Program content is the same for every viewer. Occasionally one viewer may see, hear, or read information of specific relevance to him (as happens when a guest on a television talk show turns to the camera and says, “Hi, Mom”), but such electronic media have no capacity for conveying user specific information simultaneously to each user.

(Spec. p. 1, ll. 26-32.) In this context, information about or conveyed by a broadcast television program, such as a broadcast talk show is not considered “user specific.” In this context it is unreasonable to assert that the talk show is “user specific” merely because the user desires to see the content of the show and has thus supplied the channel of the program transmission. Mere user selection does not make the talk show “user specific.” Something more is required. The information must have some specific relevance to the particular user, something directed to that user rather than to all the users that view the talk show. In this instance, the “user specific”

information is the guest saying “Hi, Mom.” This statement is related to a *particular* user and is thus “user specific” to the speaker’s mother. The statement is not “user specific” to any viewer that has supplied the channel to view the talk show.

The Examiner’s interpretation of “user specific” to encompass “user supplied” leads to absurd results in the context of the claims and the specification. Under the Examiner’s interpretation, all broadcast television images are generated by processing “user specific” data. This is because a user supplies a channel selection when viewing a television program. Claim 187 sets forth *generating an image by processing at least one user specific subscriber datum*. This limitation would be meaningless under the Examiner’s interpretation as all broadcast images are generated by processing a channel selection of the user.

Significantly, the Examiner’s Answer expressly acknowledges the difference between appellants’ invention and the applied art:

The examiner recognizes the fact that the data of applicants’ disclosed invention are “user specific” for reasons that are different from the way in which the user inputs of a teletext decoder are “user specific.” Such differences, however, are not recited in the claims.

(Examiner’s Answer, p. 10.) To the contrary, the pending claims, given a reasonable interpretation of the term “user specific,” do set forth an invention that is different from prior art teletext decoders. It is only by interpreting the term “user specific” in an unreasonably broad manner (*i.e.* by interpreting “user specific” to encompass “user supplied”), that the Examiner is able to conclude that both the data of appellants’ invention and the user inputs to teletext decoders are “user specific.” The Examiner acknowledges that the data of appellants disclosed invention are “user specific” for reasons that are different from the way in which the Examiner alleges user inputs of a teletext decoder are “user specific.” In fact, the difference is that the data of appellants disclosed invention are related to the *particular* user of the receiver and are thus, in fact, “user specific” while the user inputs of a teletext decoder are merely user supplied rather than being “user specific.” The Examiner’s unreasonably broad interpretation of the claim term

“user specific” is improper. “Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim. The construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.” *Phillips*, 415 F.3d at 1316, 75 U.S.P.Q.2d at 1328 (quoting *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1250, 48 U.S.P.Q.2d 1117, 1122 (Fed. Cir. 1998)). Accordingly, it is improper for the Examiner’s to give the term “user specific” an interpretation different from the interpretation used in the disclosure of the invention.

For at least the reasons set forth in the Appeal Brief and supplemented above, appellants respectfully request the reversal of all rejections premised on the faulty notion that any user input constitutes “user specific data.”

B. Proper Interpretation Of “Locally Generated”

As set forth in Section 3. B. of the Argument presented in the Appeal Brief, the term “locally generated” should be interpreted to mean “brought into existence at a particular location.” Although the Examiner does not take issue with the language of this construction, the Examiner and appellants continue to disagree on the proper interpretation of the term. The Examiner recognizes that appellants’ invention and teletext are different:

The examiner recognizes the fact that the images of applicants’ disclosed invention are “locally generated” in a manner that is different from the way in which teletext images are “locally generated.”

(Examiner’s Answer, p. 10.) Appellants assert that the difference between the disclosed invention and teletext is set forth by the claims.

The Examiner characterizes appellants’ position by reaching back to the response of January 9, 2003, where appellants stated:

“Applicants have consistently argued that a locally generated image is different from a . . . teletext image that is generated wholly by processing an incoming signal received from a remote source.” [lines 8-10 on page 83]

(Examiner's Answer, p. 13 (brackets and omission in original).) Appellants maintain that there is a fundamental difference between images that are generated locally at receiver stations and images that are based solely on remotely received data such as teletext. The difference is that the appearance of a locally generated image is not specified by a remote source. For example, in appellants' specification, although the locally generated graphic of the user's own stock performance is generated based on instruction signals received from a remote source (Spec. p. 24, ll. 22-27), the remote source does not specify the appearance of the image of the user's stock performance. Rather, the local processor calculates the performance of the user's stock portfolio and specifies the appearance of the image depicting the user's stock portfolio performance. (Spec. p. 24, l. 27 - p. 25, l. 14.) On the other hand, in conventional teletext systems, it is the remote teletext source that specifies the text that appears.

As noted in the Appeal Brief, this difference between teletext and local generation has been previously cited in the patent literature:

In teletext systems known in the prior art, no significant modifications are made to the transmitted pages prior to their display on the screen other than, perhaps, the addition of a page number in a fixed position on certain pages. In particular, conventional teletext systems do not provide for the addition of locally generated information by the receiver which might change the meaning or interpretation of the transmitted information.

U.S. Patent 4,885,775, col. 2, ll. 5-13. In the Appeal Brief, appellants summarized the difference by asserting that in a locally generated image, the content of the image is brought into existence at the receiver station. (Appeal Brief, p. 25.) In response, it is asserted: "The examiner does not understand why applicant's efforts did not result in amended claims having positive recitations of this 'local content aspect' of the invention." (Examiner's Answer, p. 16.) However, the Examiner fails to consider the prosecution history. Appellants did present amended claims in the response of January 9, 2003. The response included amended claims that set forth use of user

specific data in creating the locally generated images.¹ The content of the locally generated image is brought into existence by processing user specific data at the receiver station. The Examiner has failed to consider the significance of these claim amendments, as is made clear by the statement:

The examiner again notes that the “locally generated” terminology is a label in the sense that it only indicates that the recited “image” is, in some unspecified way, *locally generated*. This label, however, is not the same as a limitation that positively recites a step/circuit for locally generating in a specified way. Instead of amending the claims to positively recite such a step/circuit to distinguish the claim over the teletext prior art, applicant has persistently maintained the position that, “teletext images are not locally generated.”

(Examiner’s Answer, p. 16.) Nothing could be farther from the truth. The most cursory reading of claim 187 reveals a positively recited step for locally generating in a specified way. Claim 187 includes a step of *generating an image by processing at least one user specific subscriber datum*. The prosecution history reveals that the Examiner is mistaken in stating: “Applicant choose not to amend the claims to provide clarification, and instead has elected to hang his hat, with respect to this issue, on the erroneous position that, ‘teletext images are not locally generated images.’” (Examiner’s Answer, p. 16.) Appellants have presented amended claims that do specify how locally generated images are generated.

The Examiner argues that teletext images are “locally generated” by decoders on the receiving side of teletext systems. (Examiner’s Answer, p. 13.) The Examiner cites to various references to show the use of the term “locally generated” in the context of teletext systems.

¹ It is clear that had appellants amended the claims to recite the term “local content” the Examiner still would not be satisfied. The Examiner asserts “that Teletext images are not only ‘locally generated’ images but are locally generated to have a ‘locally generated display content;’ i.e. each decoder has the ability to present the information content to the user in a different manner (i.e. color of the background/foreground, size of characters, fonts used, etc,...).” (Examiner’s Answer, p. 22.) Although the Examiner recognizes that there is a distinction between the applied art and the appellants’ disclosed invention, it appears that the Examiner believes that there is no language that can capture this distinction. In any event, the Examiner has proposed no claim language to set forth the acknowledged distinction between the disclosed invention and teletext decoders. Appellants submit that the amendment to the claims setting forth the use of user specific data in creating the locally generated images appropriately and effectively distinguishes the disclosed invention from the applied teletext references.

However, this is not how the term “locally generated” is used in appellants’ specification or claims. “The specification should also be relied on for more than just explicit lexicography or clear disavowal of claim scope to determine the meaning of a claim term when applicant acts as his own lexicographer; the meaning of a particular claim term may be defined by implication, that is, according the usage of the term in context in the specification.” M.P.E.P. § 2111.01 III. Accordingly, the Examiner’s reliance on the use of the term “locally generated” in extrinsic references rather than on the implicit meaning of the term in the context of appellants’ specification is improper.

Appellants respectfully submit that the assertions regarding the term “locally generated” in the Examiner’s Answer demonstrate that Examiner is improperly interpreting the claims resulting in an unreasonable interpretation that forms the basis of the rejections over the applied references directed to teletext systems.

C. Proper Interpretation Of “Organize”

The Examiner’s Answer provides no reasoning or analysis in interpreting the term “organize.” Rather, the Examiner summarily concludes:

As noted above and throughout prosecution, conventional teletext systems necessarily transmitted pages of data as pieces given the limited bandwidth of the TV signals that conveyed the teletext transmissions and, as such, these pieces were necessarily “organized” back into complete page formats by the decoders. The examiner maintains that the “organize” recitations of the claims do nothing to avoid the teletext prior art.

(Examiner’s Answer, p. 22.) Appellants maintain that teletext transmissions were not necessarily “organized” into complete page formats for the reasons set forth in Section 3. C. of the Argument presented in the Appeal Brief.

4. Response To Prior Art Rejections Under § 102

In Sections E4-E9 of the Final Office Action, the Examiner rejects claims 56-58, 60-63, 65, 66, 67-72, 74, 93-95, 100, 102, 103, 106-109, 187-189, and 191-197 under 35 U.S.C.

§ 102(b) as being anticipated by Japanese published application no. 55-028691 listing Kenzou Oono *et al.* as inventors (“Oono”). Appellants maintain that the Examiner fails to set forth a *prima facie* case of anticipation of these claims as Oono fails to disclose each and every element of the claimed invention. Appellants set forth the requirements of a proper rejection under 35 U.S.C. § 102 in Section 4 of the Argument presented in the Appeal Brief.

The examiner’s answer is required to include, under appropriate headings, in the order indicated, the following items:

....

(9) *Grounds of Rejection.* For each ground of rejection maintained by the examiner . . . , an explanation of the ground of rejection.

....

(c) For each rejection under 35 U.S.C. 102, the examiner’s answer must explain why the rejected claims are anticipated or not patentable under 35 U.S.C. 102, pointing out where all the specific limitations recited in the rejected claims are found in the prior art relied upon in the rejection.

M.P.E.P. § 1207.02. The Examiner fails to point out where all the specific limitations recited in the rejected claims are found in the teachings of Oono.

A. Oono Applied Against Claim 187

In Section E4 of the Final Office action, the Examiner asserts that Oono anticipates claim 187 under § 102(b). This rejection was repeated in Section R27 of the Examiner’s Answer. In Section 4. A. of the Argument presented in the Appeal Brief, appellants explain the teachings of Oono and fully set forth why Oono fails to teach each limitation of claim 187.

Appellants maintain, for the reasons set forth in the Appeal Brief, that Oono does not teach the “user specific subscriber datum” recited in claim 187. Oono merely discloses that an end user uses a keyboard to request that data from a headend transmitter station be embedded in the television signal and transmitted to the user. This user input is not a user specific subscriber datum for the reasons set forth in the Appeal Brief. “The examiner maintains that inputted ‘datum’ representing requests for information clearly ‘relate to the user.’” (Examiner’s Answer,

p. 61.) However, a “user specific subscriber datum” as properly interpreted relates to a *particular* user. The requests for information in Oono do not relate to a *particular* user. Every user that desires and requests the data will input the same menu selection. Accordingly, no menu selection is specific to a *particular* user.

Appellants maintain that for the reasons set forth in the Appeal Brief, Oono does not teach *generating an image by processing at least one user specific subscriber datum*. Oono does not teach that the user’s request for data is processed by either CPU (3) or RAM (4) to generate any image. The Examiner asserts, “The fact that the user controls the terminal via inputs to the processor (3) supplied via keyboard (9) refutes this position.” (Examiner’s Answer, p. 61.) The Examiner is incorrect. The Examiner identifies no inputs to the processor (3) supplied via keyboard (9) that are processed to generate an image.

Appellants maintain that for the reasons set forth in the Appeal Brief, Oono fails to teach a step of organizing. “The examiner maintains that the information that is received must be decode [sic], interpreted, and ‘organized’ into the displayable ‘page/image’ format that is sorted in RAM (4). It is simply implicit in the function/operation of all videotext decoders, i.e. Oono et al being no different.” (Examiner’s Answer, p. 61-62.) The organizing of videotext data is not implicit in the operation of the Oono apparatus. The Oono system may merely place data transmitted in a serial fashion in RAM (4) in the order it is received. It is not implicit that any data stored in RAM (4) is arranged in a desired pattern. Accordingly, Oono does not teach a step of organizing.

Appellants request that the rejection of claim 187 under 35 U.S.C. § 102 as being anticipated by Oono be reversed for the reasons set forth in the Appeal Brief.

B. Oono Applied Against Claims Depending From 187

In Section E5 of the Final Office Action, the Examiner rejects claims 188, 189, 191, 192, 193, 194, 195, 196, and 197, all of which depend from claim 187, as being anticipated by Oono under § 102(b). This rejection is repeated in Section R-28 of the Examiner’s Answer. These

claims are patentable over Oono for the reasons set forth in the Section 4. B. of the Argument presented in the Appeal Brief. Appellants respectfully request that the rejection of claims 188, 189, 191, 192, 193, 194, 195, 196, and 197 under 35 U.S.C. § 102 as being anticipated by Oono be reversed for the reasons set forth in the Appeal Brief.

i) Claims 188 And 189

The rejection of claims 188 and 189 in the Examiner's Answer is a verbatim copy of the Final Office Action. Accordingly, the Appeal Brief fully sets forth the errors in this rejection.

ii) Claims 191 And 192

Claim 191 sets forth receiving and passing to a storage device the user specific subscriber datum originally set forth by claim 187. Claim 192 sets forth contacting a remote station to obtain the user specific subscriber datum. In the Appeal Brief, appellants argue that the rejections of dependent claims 191 and 192 are not consistent with the rejection of claim 187. The Examiner relies on the receiver's terminal address to show the user specific subscriber datum with respect to claims 191 and 192. However, the terminal address is not based on information supplied by a user of the receiver station, as is the user specific subscriber datum as set forth in claim 187. The Examiner's Answer does not address this error in the rejection of claims 191 and 192. Rather, the Examiner's Answer alters the wording of the rejection to allege each receiver's terminal address is broadcasted within packets "that are obtained from the remote source." This argument fails to point out how the terminal address has the characteristics of the user specific subscriber datum as set forth in claim 187.

iii) Claims 193 And 194

The rejection of claims 193 and 194 is maintained in the Examiner's Answer. (Examiner's Answer, p. 62.) The rejection of claims 193 and 194 in the Examiner's Answer is a verbatim copy of the Final Office Action. Accordingly, the Appeal Brief fully sets forth the errors in this rejection.

iv) Claim 197

None of the Final Office Action, the Advisory Action, or the Examiner's Answer addresses the limitations of claim 197 and, thus, the Examiner does not establish that Oono anticipates claim 197. Claim 197 is patentable over Oono for the reasons set forth in the Appeal Brief.

C. Oono Applied Against Claim 93 And Claims Depending From 93

In Section E6 of the Final Office Action, the Examiner asserts that Oono anticipates claim 93 under 35 U.S.C. § 102(b) for the same reasons that Oono anticipates claim 187. This rejection is repeated in Section R-29 of the Examiner's Answer, which states:

In Oono et al. the image that is generated/displayed at the receiver is generated via the "organized" display data that is stored within RAM (3). This organized data, and hence the resulting generation of the image, result from the processing of "said user specific datum" as addressed with respect to the rejection of claim 187.

(Examiner's Answer, p. 63.) The Examiner's reasoning highlights the flaws in the rejection of claim 187. The Examiner asserts that an image is generated via the display data stored in RAM. However, the claim sets forth *generating an image in response to said organized signal by processing at least one user specific subscriber datum*. With respect to the rejection of claim 187, the Examiner relies on a user request for data that is transmitted to the headend to show a user specific subscriber datum. Oono includes no teaching that the display data in RAM is used to generate an image by processing the user request that is transmitted to the headend. This highlights the fact that Oono does not teach a "user specific subscriber datum" for the reasons set forth in the Appeal Brief with regard to claim 187.

In Section E7 of the Final Office Action, the Examiner rejects claims 94, 95, 100, 102, 103, and 106-109, all of which depend from claim 93, as being anticipated by Oono under § 102(b). This rejection is repeated, without any supporting argument, in Section R-30 of the Examiner's Answer. Appellants maintain that these claims are not anticipated by Oono for the reasons set forth in the Appeal Brief.

D. Oono Applied Against Claim 56

In Section E8 of the Final Office Action, the Examiner asserts that Oono anticipates claim 56 under § 102(b) for the same reasons that Oono anticipates claim 187. This rejection is repeated in Section R31 of the Examiner's Answer. Appellants submit that Oono fails to anticipate claim 56 for the reasons set forth in the Appeal Brief.

The Examiner argues, "The processing that is described in Oono et al. includes the generation of user selected audiovisual presentations via the processing (@3) of inputted 'user specific' data (e.g. requests)." (Examiner's Answer, p. 64.) The Examiner fails to explain how any data input to the Oono system relates to a *particular* user. The Examiner has failed to show that "user specific" data is taught or suggested by Oono. Oono does not teach "user specific data" because the user input relied upon by the Examiner is not related to a *particular* user.

Furthermore, even if the user requests relied upon by the Examiner are considered to be "user specific data," Oono still fails to teach or suggest the claimed step of *executing processor instructions to process said remotely originated data and said user specific data at said video apparatus in order to generate said locally generated image*. The Examiner asserts that this step "is broad enough to read on processing that occurs sequentially in time provide [sic] that the result of the processing is a locally generated image." (Examiner's Answer, p. 65.) In essence, the Examiner argues that claim limitation reads on any system that processes remotely originated data and user specific data that also locally generates an image. The Examiner appears to maintain this position regardless of the function of the "user specific data." Under the Examiner's logic, the "user specific data" could be processed completely independently of locally generating an image as long as the result of the method as a whole includes locally generating an image. However, such independent processing is not *executing processor instructions in order to generate said locally generated image*. In the case of the teachings of Oono, the user request relied upon to show "user specific data" is merely transmitted to the broadcast station or CATV station. Oono, p. 7. Oono does not disclose that this user request is retained or is processed in any other manner. This user request is processed completely

independently of the generation of any image. Accordingly, Oono does not teach or suggest executing processor instructions to process the user request *in order to generate* any locally generated image.

Appellants respectfully request that the rejection of claim 56 under 35 U.S.C. § 102(b) as being anticipated by Oono be reversed for the reasons set forth in the Appeal Brief and supplemented above.

E. Oono Applied Against Claims Depending From Claim 56

In Section E9 of the Final Office Action, the Examiner rejects claims 57, 58, 60-63, 65, 66, 67-72, and 74, all of which depend from claim 56, as being anticipated by Oono under § 102(b). This rejection is repeated verbatim in Section R32 of the Examiner's Answer. Accordingly, the Appeal Brief fully sets forth the errors in this rejection.

5. Response To Prior Art Rejections Under § 103

A. Requirements Of Section 103

Appellants set forth the requirements of a proper rejection under 35 U.S.C. § 103 in Section 5. A. of the Argument presented in the Appeal Brief.

The examiner's answer is required to include, under appropriate headings, in the order indicated, the following items:

....

(9) *Grounds of Rejection.* For each ground of rejection maintained by the examiner . . . , an explanation of the ground of rejection.

....

(d) For each rejection under 35 U.S.C. 103, the examiner's answer must:

(i) state the ground of rejection and point out where each of the specific limitations recited in the rejected claims is found in the prior art relied upon in the rejection,

(ii) identify the differences between the rejected claims and the prior art relied upon (i.e., the primary reference), and

(iii) explain why it would have been obvious at the time the invention was made to a person of ordinary skill in the art to have modified the primary reference to arrive at the claimed subject matter.

M.P.E.P. § 1207.02. The Examiner's Answer does not comply with the above requirements.

B. Rejection Based On Oono In View Of Zworykin

Section E-10 of the Final Office Action, the Examiner rejects claim 73 under 35 U.S.C. § 103(a) as being unpatentable over Oono in view of U.S. Patent No. 2,757,226 issued to Vladimir K. Zworykin ("Zworykin"). This rejection is repeated verbatim in Section R-26 of the Examiner's Answer. Accordingly, appellants respectfully request that this rejection be reversed as the Appeal Brief fully sets forth the errors in this rejection.

C. Rejection Based On Hedger In View Of Sedman And Either Yoshino Or Bart

Claims 56-58, 60-63, 65, 66, 73, 89-91, 93-95, 98, 100, 102, 103, 106-109 and 187-197 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over "Telesoftware - Value Added Teletext" by J. Hedger *et al.* ("Hedger") in view of "The Use of MicroCobol for Telesoftware" by E. C. Sedman ("Sedman") and either British Patent 1 405 141 naming inventors Hirokazu Yoshino *et al.* ("Yoshino") or U.S. Patent No. 4,218,698 issued to Theodor E. Bart *et al.* ("Bart"). Appellants maintain that these rejections should be reversed for the reasons set forth in Section 5. C. of the Argument presented in the Appeal Brief. The Examiner has failed to provide a sufficient explanation why it would have been obvious at the time the invention was made to a person of ordinary skill in the art to have modified the primary reference to arrive at the claimed subject matter.

i) Claim 56

In Section E-11 of the Final Office Action, the Examiner sets forth a rejection of claim 56 based on Hedger in view of Sedman and either Yoshino or Bart. This rejection is repeated in Section R22 of the Examiner's Answer.

In the Appeal Brief, appellants argue that the Examiner has failed establish a proper motivation to combine the applied references. The Examiner merely patches together selected aspects of several references in a hindsight attempt to reconstruct appellants' invention. "It is insufficient to establish obviousness that the separate elements of the invention existed in the prior art, absent some teaching or suggestion to combine the elements." *Arkie Lures, Inc. v. Gene Larew Tackle, Inc.*, 119 F.3d 953, 956, 43 U.S.P.Q.2d 1294, 1297 (Fed. Cir. 1997). The Examiner points to alleged advantages of the individual applied references. However, the Examiner points to no teaching or suggestion to combine the elements of the applied references.

The Examiner recognizes that the primary reference to Hedger does not show or suggest *contacting a remote data source*. (Examiner's Answer, p. 49.) The Examiner asserts that it would have been obvious to have modified the teachings of Hedger to contact a remote data source by using a two-way viewdata form of data distribution. In the Appeal Brief, appellants explained that Hedger explicitly provides reasons for not contacting a remote data source.

Indeed, the average person is still very wary of 'computers' and anything that appears remotely like 'Big Brother' is likely to frighten him off!

Hedger at 555, col. 2.

Since there is no possibility of 'feedback' to a central computer of information supplied by the viewer, the system is completely confidential and viewers can supply information truthfully in the full confidence of knowing it can go no further than the television receiver - pull the power cord out and the slate is wiped clean.

Hedger at 563, col. 2. Surprisingly, the Examiner asserts that this explicit recognition in the teachings of Hedger of the advantages of a one-way data distribution system over a two-way data distribution system does not teach away from using a two-way data distribution system.

(Examiner's Answer, p. 51.) Accordingly, the Examiner proposes to modify the teachings of Hedger to provide financial information supplied by a viewer to a remote computer. The Examiner asserts that modification is suggested because two-way distribution systems have known advantages (although the advantages are not recited by the applied art). *Id.*

“A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant.” *In re Gurley*, 27 F.3d 551, 554, 31 U.S.P.Q.2d 1130, 1132 (Fed. Cir. 1994). A person of ordinary skill, upon reading the Hedger reference, would be discouraged from employing a two-way data distribution system. The fact that there are advantages of two-way distribution systems does not change the fact that Hedger teaches away from using a two-way distribution system. The Examiner’s assertion that Hedger does not teach away from the applied combination of references is contradicted by the explicit teachings of the primary reference.

In the Appeal Brief, appellants set forth the reasons why simply reciting known advantages of various elements selected from different reference is insufficient to establish a motivation to combine the selected elements. In response, the Examiner merely notes that the mixed display mode of the secondary references to Bart and Yoshino have known advantages. The Examiner asserts that these known advantages would be desirable features to have added to the Hedger system. (Examiner’s Answer, p. 51.) However, there is no teaching or suggestion in the applied art or in the knowledge of one of ordinary skill to actually combine the various advantageous features as suggested by the Examiner.

For at least the above reasons, appellants respectfully request that the rejection of claim 56 as being unpatentable over Hedger in view of Sedman and either Yoshino or Bart be reversed.

ii) Claims Depending From Claim 56

Claims 57, 58, 60-63, 65, 66, 73 and 89-91 depend from claim 56. In section E-12 of the Final Office Action, these claims are rejected as being unpatentable over Hedger in view of Sedman and either Yoshino or Bart for the same reason that was set forth for claim 56. This rejection is repeated verbatim in Section R23 of the Examiner’s Answer. Accordingly, appellants respectfully request that this rejection be reversed as the Appeal Brief fully sets forth the errors in this rejection.

iii) Claim 93

In section E-13 of the Final Office Action, claim 93 is rejected as being unpatentable over the three-reference combination of Hedger in view of Sedman and further in view of either Yoshino or Bart. Section R24 of the Examiner's Answer repeats this rejection. The Final Office Action fails to set forth a proper rejection of claim 93 under 35 U.S.C. § 103(a) for the reasons set forth in the Appeal Brief.

In the Appeal Brief, appellants pointed out that the applied art fails to show or suggest *outputting said video presentation . . . comprising . . . a coordinated display using said generated image and said video image* as set forth by claim 93. The Examiner asserts; "Any time locally generated image data is overlaid/inset into a displayed video signal, the timing of output/display was necessarily 'coordinated' with the raster scanning of the displayed video signal." (Examiner's Answer, p. 54.) The Appeal Brief notes that there is no suggestion in the applied art that any image generated by processing a user specific subscriber datum is overlaid/inset into a displayed video signal as set forth in claim 93. The Examiner's Answer is silent regarding this contention.

The Examiner's Answer does address appellants' argument that locking the timing of the horizontal and vertical display frequency of the video does not control the time at which the overlay is displayed.

[I]t is noted that claim 93 only requires the respective images to be displayed in a "coordinated" fashion. Locking their vertical and horizontal scanning phase and frequency together, as was known to be required/"essential" to produce a stable picture whenever one video image is overlaid on another, results in a "coordinated" display: i.e., a display in which the display timing of one image is locked to (i.e. "coordinated" with) the display timing of the other (i.e. known in the art as "genlock"). As with other terms of the claims, the examiner maintains that applicant is simply reading too much into the "coordinated" display terminology.

(Examiner's Answer, pp. 54-55.) The Examiner appears to be arguing that any display whatsoever that uses two images is required to be coordinated. Such an argument renders the claim term "coordinated" superfluous or meaningless. As with other terms of the claims,

appellants maintain that the Examiner is simply reading the claim term “coordinated” out of the claim.

Appellants’ specification, as cited in the Summary Of The Claimed Subject Matter in the Appeal Brief, describes a locally generated overlay of the user’s stock portfolio performance overlaid on a studio generated graphic. (Spec. p. 26, ll. 8-11.) The locally generated overlay is coordinated with the studio generated graphic. The user’s stock performance is depicted as a line. (Spec. p. 25, ll. 9-14.) The line itself is not meaningful. (Spec. p. 25, ll. 15-22.) The studio generated graphic is a graph of the performance of the Dow Jones Industrials. (Spec. p. 25, ll. 28-31.) The line representing the performance of the user’s stock portfolio is given meaning through coordination with the graph of the Dow Jones Industrials. (Spec. p. 26, ll. 14-19.) The locally generated overlay and the studio generated graphic are displayed in a particular manner so as to form a coordinated display. In this case the images are displayed together at a particular time so as to give meaning to the line depicting the user’s stock performance. This disclosure is in stark contrast to the showing of the applied art. For example, Yoshino discloses, “The present invention also provides a television receiver on the picture tube of which a television program and the result of the computing process are shown simultaneously.” Yoshino, p. 4, ll. 110-113. The television program and the computing process of Yoshino are merely displayed simultaneously. Yoshino makes no suggestion that there is any relationship between television program and the computing process that would result in a coordinated display.

Appellants assert that for the above reasons the Examiner has failed to set forth a *prima facie* case of obviousness against claim 93. Appellants respectfully request that this rejection of claim 93 be reversed.

iv) Claims Depending From Claim 93

Section E-14 of the Final Office Action includes a single sentence setting forth that claims 94, 95, 98, 100, 102, 103 and 106-109 are rejected as being unpatentable over the three-reference combination of Hedger, Sedman, and either Yoshino or Bart for the same reason that

was set forth for claim 93. The Advisory Action does not address these claims. Section R25 of the Examiner's Answer repeats verbatim the single sentence of the Final Office Action. The Examiner makes no attempt to establish a *prima facie* case of obviousness against these claims as explained in the Appeal Brief. Accordingly, appellants request that the rejections of these claims based on Hedger, Sedman, Yoshino and Bart be reversed.

v) Claim 187

Section E-14 of the Final Office Action includes a single sentence setting forth that claims 187-197 are rejected as being unpatentable over the three-reference combination of Hedger, Sedman, and either Yoshino or Bart for the same reason that was set forth for claim 93. The Advisory Action does not address the patentability of claim 187 over Hedger, Sedman, and Yoshino or Bart. Section R25 of the Examiner's Answer repeats verbatim the single sentence of the Final Office Action. Appellants request that the rejection of claim 187 under 35 U.S.C. § 103 as being unpatentable over the three-reference combination of Hedger, Sedman, and either Yoshino or Bart be reversed for the reasons set forth in the Appeal Brief.

vi) Claims Depending From Claim 187

Section E-14 of the Final Office Action includes a single sentence setting forth that claims 187-197 are rejected as being unpatentable over the three-reference combination of Hedger, Sedman, and either Yoshino or Bart for the same reason that was set forth for claim 93. The Advisory Action does not address the patentability of claim 188-197 over Hedger, Sedman, and Yoshino or Bart. Section R25 of the Examiner's Answer repeats verbatim the single sentence of the Final Office Action. Appellants request that the rejection of claims 188-197 under 35 U.S.C. § 103 as being unpatentable over the three-reference combination of Hedger, Sedman, and either Yoshino or Bart be reversed for the reasons set forth in the Appeal Brief.

D. Rejection Based On Kirschner In View Of Bart

Claims 56-58, 60-63, 65-74 and 89-91 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,253,157 issued to Wallace Kirschner ("Kirschner") in view

of Bart. Appellants maintain that these claims are patentable over Kirschner in view of Bart for the reasons set forth in Section 5. D. of the Argument presented in the Appeal Brief. The Examiner does not properly identify the differences between the rejected claims and the teachings of Kirschner and fails to provide a sufficient explanation why it would have been obvious at the time the invention was made to a person of ordinary skill in the art to have modified the teachings of Kirschner to arrive at the claimed subject matter.

i) Claim 56

In Section E-15 of the Final Office Action, the Examiner rejects claim 56 as being unpatentable over Kirschner in view of Bart. Section R12 of the Examiner's Answer is a verbatim copy of the rejection from the Final Office Action. Appellants maintain that claim 56 is patentable over Kirschner in view of Bart for the reasons set forth in the Appeal Brief. In the Appeal Brief, appellants asserted that the Examiner incorrectly characterized the teachings of Kirschner and failed to identify an adequate motivation to combine the teachings of Kirschner and Bart. The Examiner's Answer does not address appellants' contentions. Appellants request that this rejection be reversed for the reasons set forth in the Appeal Brief.

ii) Claims Depending From Claim 56

Claims 57, 58, 60-63, 65-74 and 89-91 depend from claim 56. In section E-16 of the Final Office Action, these claims are rejected as being unpatentable over Kirschner in view of Bart for the same reason that was set forth for claim 56. This rejection is repeated verbatim in Section R13 of the Examiner's Answer with no further comments. Accordingly, appellants request that this rejection be reversed for the reason set forth in the Appeal Brief.

E. Rejection Based On Betts In View Of Bart, Oono And Crowther

Claims 93, 94, 95, 98, 100, 103, 106-108, 187-191 and 193-196 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over British Patent 1 556 366 naming as inventor William Robert Betts ("Betts") in view of Bart. Claims 188-191, 193 and 194 stand rejected as being

unpatentable over the three-reference combination of Betts in view of Bart and further in view of Crowther. Claims 102, 109, 192 and 197 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the three-reference combination of Betts in view of Bart and Oono.

Appellants respectfully request that these rejections be reversed for the reasons set forth in Section 5. E. of the Argument presented in the Appeal Brief. The Examiner fails to properly identify the differences between the rejected claims and the teachings of Betts.

Betts is a British patent relating to a system that provides pages of data during the line scan periods of a television signal. In the Betts system, the viewer selects a page for viewing and the system detects the transmission of the particular page, stores the page and subsequently provides the necessary signal to display the desired page. Betts, p. 1, ll. 40-45. In the Betts system, a central processing unit is used to perform certain functions of the system.

Crowther is a three-page paper from a colloquium on broadcast and wired teletext systems. Crowther discloses that the data acquisition circuits for a teletext decoder can be achieved with three dedicated integrated chips. Crowther, p. 9/3. A dedicated control chip receives and stores instructions, such as page selections. Crowther, p. 9/2. A dedicated data acquisition chip compares information received from a video processor with control information from the control chip and if the data line being transmitted is part of the requested page then the data is written to memory. Crowther, p. 9/3.

The Examiner appears to improperly assert that the teachings of Betts and the teachings of Crowther are interchangeable:

The processor (13) in Betts performed the functions of a conventional teletext decoder and, implicitly, provides for all of the operations that were provided by data acquisition circuitry of Crowther et al.; i.e. being that the processor (13) of Betts simply represents a software implementation of such conventional dedicated circuitry.

(Examiner's Answer, p. 29.) To the extent that the Examiner simply relies on user selections of pages of data in the teachings of both Betts and Crowther in an attempt to show "user specific data," these references fail to render the claimed invention unpatentable for the reasons discussed

above — i.e. the Examiner has not demonstrated that any page selection is related to a *particular* user. Accordingly, for the reasons set forth in the Appeal Brief and above at Section 3, the page selections cited by the Examiner are not “user specific data.” Furthermore, the Examiner argues that teletext character displays are generated as a result of processing the user’s page selection. As was pointed out in the Appeal Brief, this is insufficient to show or suggest the claim limitations regarding image generation. To the extent that the Examiner may be relying on further details of the Betts and Crowther systems, the Examiner has not demonstrated that the central processing unit in Betts implicitly provides for all the operations that were provided by the data acquisition circuitry of Crowther.

i) Claim 187

In Section E-17 of the Final Office Action, the Examiner rejects claim 187 under 35 U.S.C. § 103(a) as being unpatentable over Betts in view of Bart. This rejection is practically copied verbatim in Section R6 of the Examiner’s Answer with no further comments. Appellants submit that claim 187 is patentable over Betts in view of Bart for the reasons set forth in the Appeal Brief. In the Appeal Brief, appellants pointed out that the selected page number of Betts fails to suggest a *user specific subscriber datum* for the reasons set forth in Section 3 of appellants’ argument. (Appeal Brief, p. 58.) Appellants pointed out that the Examiner does not set forth where Betts shows or suggests that the selected page number is actually processed during the generation of an image. Accordingly, Betts does not show or suggest the claimed step of *generating an image by processing at least one user specific subscriber datum*. (Appeal Brief, p. 58-59.) Additionally, appellants explained that the mere storage of teletext page data does not suggest the claimed step of *organizing* as set forth by claim 187. *Id.* Appellants further argued that the applied art fails to teach distinct steps of organizing discrete signals and generating an image. (Appeal Brief, p. 58-59.) Bart fails to correct for these deficiencies of the primary reference. The Examiner’s Answer does not address appellants’ contentions in the

context of the teachings of Betts. Appellants request that the rejection of claim 187 as being unpatentable over Betts in view of Bart be reversed for the reasons set forth in the Appeal Brief.

ii) Claims 93, 107 And 108

Section E-27 of the Final Office Action rejects claims 93, 107 and 108 over Betts in view of Bart for the same reasons that were set forth for claim 187. This rejection is repeated in Section R9 of the Examiner's Answer. Appellants maintain that claim 93 is patentable over Betts in view of Bart for the reasons set forth in the Appeal Brief. In the Appeal Brief, appellants explain that Betts fails to suggest a user specific subscriber datum for the reasons set forth in Section 3 of the argument. (Appeal Brief, p. 60.) Additionally, appellants pointed out that Betts fails to suggest *generating an image in response to said organized signal* and fails to set forth a step of *organizing* as set forth in claim 93. The secondary reference to Bart does not correct these deficiencies of the primary reference. The Examiner's Answer does not address appellants' contentions with regard to the rejection based on Betts. Rather the Examiner's Answer addresses the outputting step of claim 93. Claims 107 and 108 depend from claim 93 and are patentable over Betts in view of Bart for at least the reasons set forth above with respect to claim 93. Accordingly, appellants request that the rejection of claims 93, 107, and 108 over Betts in view of Bart be reversed for the reasons set forth in the Appeal Brief.

iii) Claims 195 And 196

Claims 195 and 196 depend from claim 187. Section E-17 of the Final Office Action, in addition to rejecting claim 187 as being unpatentable over the combination of Betts in view of Bart, rejects claims 195 and 196. Section R6 of the Examiner's Answer repeats this rejection. Claims 195 and 196 are patentable over Betts in view of Bart for at least the reasons set forth above with respect to claim 187.

iv) Claims 188-191, 193 And 194

Claims 188-191, 193 and 194 depend from claim 187. In Section E-25 of the Final Office Action, claims 188-191, 193 and 194 are rejected as being unpatentable over the three-

reference combination of Betts in view of Bart and further in view of Crowther. This rejection is renewed in Section R7 of the Examiner's Answer. The Examiner fails to present any motivation to combine the teachings of Crowther with Betts and Bart. Rather, as noted above the Examiner asserts that the processor in Betts provides for all of the operations that are provided by the data acquisition circuitry of Crowther. It is thus asserted that claims 188-191, 193 and 194 are unpatentable for the same reasons as set forth in the rejection based on Crowther in view of Bart. This rejection is unnecessarily cumulative. "Merely cumulative rejections, i.e., those which would clearly fall if the primary rejection were not sustained, should be avoided." M.P.E.P. § 706.02 I. As argued in the Appeal Brief, to the extent that Crowther and Betts show identical features, appellants' arguments regarding the rejection based on Crowther in view of Bart demonstrate that this rejection is improper. To the extent that Crowther shows features not shown in Betts, the Examiner provides no suggestion to modify Betts and Bart to include any additional features shown in Crowther.

Also in the Appeal Brief, appellants questioned the reference in the Advisory Action at page 43, to the applied "Crowther" patent. The Examiner's Answer fails to address this query. Accordingly, it remains unclear to which patent the Examiner referred.

v) Claims 94, 95, 98, 100, 103, And 106

Claims 94, 95, 98, 100, 103, and 106 depend from claim 93. In Section E-28 of the Final Office Action, claims 94, 95, 98, 100, 103, and 106 are rejected as being unpatentable over Betts in view of Bart and further in view of Crowther. Section R10 of the Examiner's Answer repeats this rejection. The Final Office Action, the Advisory Action, and the Examiner's Answer fail to address any of the limitations set forth in these dependent claims. Accordingly, the Examiner fails to establish a *prima facie* case of obviousness against these claims. This rejection merely references the unnecessarily cumulative rejection of corresponding claims 188-191, 193, and 194. This rejection is improper. Again, to the extent that the Examiner relies on identical teachings set forth in the rejections of claims 188-191, 193, and 194 based on Crowther in view

of Bart, these claims are patentable for the reason set forth below regarding the rejection based on Crowther in view of Bart. To the extent that Crowther shows features not shown in Betts, the Examiner provides no suggestion to modify Betts and Bart to include any additional features shown in Crowther.

vi) Claims 102, 109, 192 And 197

Claims 192 and 197 depend from claim 187. In Section E-26 of the Final Office Action, claims 192 and 197 are rejected as being unpatentable over the three-reference combination of Betts in view of Bart and further in view of Oono. This rejection is repeated in Section R8 of the Examiner's Answer. In the Appeal Brief, appellants pointed out that Betts does not teach or suggest reprogramming and that Oono does not teach or suggest contacting a remote station to obtain a user specific subscriber datum. Appellants also noted that the Examiner has in hindsight selected the features that he considers best from the applied art in order to arrive at appellants' claims. Appellants argued that there is no suggestion or motivation to combine the features selected by the Examiner. The Examiner's Answer does not address these contentions.

Claims 102 and 109 are similar to claims 192 and 197, but depend from claim 93. Claims 102 and 109 are rejected in section E-29 of the Final Office Action as being unpatentable over the three-reference combination of Betts in view of Bart and further in view of Oono. This rejection is repeated in Section R11 of the Examiner's Answer. The Examiner merely references the discussion with respect to corresponding claims 192 and 197. Accordingly, appellants respectfully request that the rejection of claims 102, 109, 192 and 197 be reversed for the reasons set forth in the Appeal Brief.

F. Rejection Based On Crowther And Bart

Claims 93, 94, 95, 98, 100, 103, 106-108, 187-191 and 193-196 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Crowther in view of Bart. Applicants maintain that these claims are patentable over Crowther in view of Bart for the reasons set forth in Section 5.

F. of the Argument presented in the Appeal Brief. The Examiner fails to properly identify the differences between the rejected claims and the teachings of Crowther.

The examiner's answer is required to include, under appropriate headings, in the order indicated, the following items:

....

(9) *Grounds of Rejection*. For each ground of rejection maintained by the examiner . . . , an explanation of the ground of rejection.

....

(e) For each rejection under 35 U.S.C. 102 or 103 where there are questions as to how limitations in the claims correspond to features in the prior art even after the examiner complies with requirements of paragraphs (c) and (d) of this section, the examiner must compare at least one of the rejected claims feature by feature with prior art relied on in the rejection. The comparison must align the language of the claim side-by-side with a reference to the specific page, line number, drawing reference number, and quotation from the prior art as appropriate.

M.P.E.P. § 1207.02. There are significant questions as to how the limitations of the claims correspond to the features in the applied art. The Examiner believes that the disputed issues regarding claim terminology are best understood when considering the rejection of claim 187 over Crowther. (Examiner's Answer, p. 3.) Accordingly, the Examiner compares claim 187 with Crowther in Section I of the Grounds of Rejection in the Examiner's Answer. This comparison does not align the language of the claim 187 side-by-side with references to the specific pages, line numbers, drawing reference numbers, or quotations from Crowther. To the contrary, the Examiner broadly summarizes his understanding of the teachings of Crowther. (Examiner's Answer, pp. 8-9.) The Examiner's Answer then aligns the steps of the method of claim 187 to the Examiner's asserted general understanding of the teachings of Crowther. (Examiner's Answer, p. 10.) In this alignment, there is no reference to specific pages, line numbers, drawing reference numbers or quotations from Crowther. Appellants submit that the disclosed invention and the details of the teachings of teletext references such as Crowther are different. It is only by ignoring the details of the applied references that the Examiner is able to

apply these references against the rejected claims. Appellants submit that the Examiner cannot make out a proper rejection including a comparison of claim 187 feature by feature with Crowther by aligning the language of claim 187 side-by-side with reference to specific pages, line numbers, drawing reference numbers, and quotations from Crowther as appropriate.

i) Claim 187

In Section E-18 of the Final Office Action, the Examiner rejects claims 187, 195, and 196 under 35 U.S.C. § 103(a) as being unpatentable over Crowther in view of Bart. Section R2 of the Examiner's Answer repeats this rejection. In addition, Section I of the Grounds of Rejection in the Examiner's Answer applies the teachings of Crowther to claim 187.

Claim 187 sets forth a step of *generating an image by processing at least one user specific subscriber datum*. The Examiner relies upon a user selected teletext page number to show a user specific subscriber datum. (Examiner's Answer, p. 24.) As appellants pointed out with regard to the rejection based on Betts, a page selection is not a user specific subscriber datum for the reasons set forth in the Appeal Brief and above in Section 3. Every user that views any selected teletext page will input the same selection. The user selected teletext page number is thus not data related to a *particular* user.

Additionally, as appellants have discussed with respect to the rejection based on Betts, the Examiner has failed to show that in teletext systems an image is generated *by processing at least one user specific subscriber datum*. Crowther is a three-page paper from a colloquium on broadcast and wired teletext systems and, thus, includes few details of the teletext decoder relied upon by the Examiner. However, the few details included in the Crowther article contradict the assertions made by the Examiner in the rejection of claim 187. Crowther discloses:

The decoder can be considered as three distinct sections: (a) the incoming signal acquisition, (b) memory and (c) display - see Figure 1. To a large extent the signal acquisition and display functions are *unrelated* but linked together by the memory.

Crowther, p. 9/1 (emphasis added). Crowther further divides the incoming signal acquisition section of the decoder into three functional components: a linear circuit concerned with extracting the teletext data from the incoming off-air video waveform, a digital control circuit responsible for the insertion and storage of the user commands, and a digital data acquisition circuit which processes the incoming data from the video signal so that the selected page can be recognized and written into memory. *Id.* Crowther concludes that the data acquisition circuits for teletext can be achieved with three dedicated integrated circuits, one linear and two digital. Crowther, p. 9/3.

It is the control circuit that receives and stores instructions from the user. Crowther, p. 9/2. The data acquisition circuit ensures that the correct page is written in a predetermined order into the memory. “The input data from the video processor is compared with control information from the control chip, and if the data line being transmitted is part of the requested page then the memory write control circuits are activated.” Crowther, p. 9/3. The incoming signal acquisition section of Crowther, thus, processes the page numbers of selected pages of teletext.

There is no teaching or suggestion that the incoming signal acquisition section of Crowther generates any image. To the contrary, these circuits process the incoming data so that a selected page can be recognized and written into the memory. Data is simply received and written: no generation takes place. Appellants submit that image generation takes place at the teletext encoder, where the content of transmitted teletext pages is generated. However, the Examiner argues that teletext decoders locally generate the teletext image. (Examiner’s Answer, pp. 13-15.) If the Examiner’s position is accepted, the display section of the Crowther system must generate the teletext image. There is no teaching or suggestion that the display section of Crowther processes the page numbers of any selected teletext pages. To the contrary, the functions of the incoming signal acquisition section and the display section are *unrelated*, but linked together by the memory. The control circuit of Crowther has no direct connection to the display section. Crowther, Fig. 2.

Claim 187 sets forth *generating an image by processing at least one user specific subscriber datum*. The Examiner incorrectly argues that a selected teletext page number is a user specific subscriber datum and incorrectly argues that the teletext decoder locally generates an image as set forth by appellants' claims. However, even assuming *arguendo* that the Examiner is correct, Crowther still fails to show or suggest *generating an image by processing at least one user specific subscriber datum*. This is because only the incoming signal acquisition section of Crowther processes the selected teletext page number while only the display section of Crowther can be said to generate an image (under the Examiner's reasoning).

The Examiner asserts, "The step of generating . . . reads on the of [sic] locally generating a teletext image by processing the 'user specific' request/command data inputted via the input device and stored in the control circuitry." (Examiner's Answer, p. 10.) Crowther includes no such showing or suggestion for the reasons set forth above. The Examiner recognizes that the control circuitry stores the user commands, recognizes that the data acquisition circuitry compares data to cause memory write circuits to be activated, and asserts that the display circuitry is for generating an image corresponding to the page that was requested by the user. (Examiner's Answer, p. 8.) Accordingly, there is no component of the Crowther system that *generates an image by processing at least one user specific subscriber datum*. To finesse this obvious flaw in the application of Crowther against claim 187, the Examiner asserts that Crowther shows:

Circuitry (e.g. the illustrated "SIGNAL ACQUISITION",
"MEMORY", and "DISPLAY" circuitry) ***for generating*** a teletext
image by processing the stored user specific subscriber datum.

(Examiner's Answer, p. 24.) This statement is incorrect. At best, under the Examiner's reasoning, Crowther suggests signal acquisition circuitry for processing teletext page numbers and display circuitry for generating an image. These functions are not combined to generally generate a teletext image by processing teletext page numbers. To the contrary, Crowther states, "the signal acquisition and display functions are unrelated." Crowther, p. 9/1.

Moreover, claim 187 further sets forth a step of *organizing information included in said at least one first discrete signal with information included in said second discrete signal to provide an organized signal at said receiver station*. The Examiner asserts, “the organizing step . . . reads on the process of writing a first discrete line/packet of data into the memory along ‘with’ a second subsequent line/packet of teletext data thereby ‘organizing’ the data from a plurality of lines/packets into the requested ‘page’ of data.” (Examiner’s Answer, p. 10.) Crowther, however, includes no suggestion that writing data lines to the memory organizes the teletext pages. As discussed in the Appeal Brief, “organize” should be interpreted to mean “to arrange in a desired pattern.” Crowther does not show or suggest arranging data lines in a desired pattern to form a page. Crowther merely notes that “the digital data acquisition circuit processes the incoming data from the video signal so that the selected page can be recognised and written into the memory.” Crowther at 9/1. The teletext is recognizable in page form as it is received with no reference to any information needed to arrange the data according to any pattern. There is no suggestion that the incoming data is stored in any pattern other than that in which it is received. There is thus no suggestion of any organization performed by the memory in Crowther.

“In applying [teletext] ‘prior art,’ the examiner has taken the position that the ‘locally generated’ image and ‘user specific’ data terminology of the claims, given the broadest reasonable interpretations, fails to distinguish that which is claimed over teletext prior art.” (Examiner’s Answer, p. 3.) In effect, the Examiner asserts that all teletext systems must necessarily locally generate an image in response to an organized signal and by processing a user specific subscriber datum. However, the Examiner understands that appellants’ invention is different from teletext systems such as the Crowther system. The Examiner understands “that the images in applicants’ disclosed invention are ‘locally generated’ in a manner that is different than the way in which teletext images are ‘locally generated.’” (Examiner’s Answer, p. 10.) The Examiner understands “that the data of applicants’ disclosed invention are ‘user specific’ for reasons that are different from the way in which the user inputs of a teletext decoder are ‘user

specific.’” *Id.* The Examiner understands “that the discrete signals of applicants’ disclosed invention are ‘organized’ in a manner that is different from the way in which teletext are ‘organized.’” (Examiner’s Answer, p. 11.) Despite these understandings, the Examiner strains to interpret these terms in order to support the art rejections based on teletext references such as Crowther. The Examiner must strain to make these rejections because the teletext references are directed to systems clearly different from applicants’ disclosed invention. “[T]he examiner maintains that the data inputted at the receiving station by a user to identify the page of teletext data he/she desires, i.e. the data representing the specific page request of a specific user, is ‘user specific data’ given the broadest reasonable interpretation of the terminology.” (Examiner’s Answer, p. 21.) The Examiner points to no source, either intrinsic or extrinsic, to support this position. For the reasons set forth in Section 3 of the Argument of this Reply Brief and of the Appeal Brief, appellants submit that the Examiner’s interpretation of the critical terms is so strained as to be unreasonable.

Furthermore, “The Examiner believes that this terminology issue is best understood when considering the rejection of claim 187 over [Crowther].” (Examiner’s Answer, p. 3.) However, the teachings of Crowther and the claimed invention are easily distinguishable. As explained above, even when giving the claim terms unreasonably broad interpretations, the Examiner must resort to ignoring the details disclosed in Crowther in order to make out a rejection of claim 187. The secondary reference to Bart cures none of the defects of the primary reference. Accordingly, appellants respectfully request that the rejection of claim 187 under 35 U.S.C. § 103(a) as being unpatentable over Crowther in view of Bart be reversed and that the similar rejections of appellants’ claims over teletext art be reversed.

ii) Claim 93

Section E-30 of the Final Office Action rejects claim 93 based on Crowther in view of Bart for the same reasons that were set forth for claim 187. Section R4 of the Examiner’s

Answer repeats this rejection. Appellants respectfully submit that claim 93 is patentable over Crowther in view of Bart for the reasons set forth with respect to claim 187.

iii) Claims 188-191 And 193-196

Claims 188-191, and 193-196 depend from claim 187. Section E-18 of the Final Office Action rejects claims 187, 195 and 196 as being unpatentable over Crowther in view of Bart. This rejection is repeated in Section R2 of the Examiner's Answer. In Section E-24 of the Final Office Action, claims 188-191, 193 and 194 are rejected as being unpatentable over Crowther in view of Bart for the same reasons as set forth for claim 187. Section R3 of the Examiner's Answer repeats this rejection. The Examiner's Answer does not address appellants' contentions regarding these rejections. Appellants maintain that these claims are patentable over Crowther in view of Bart for the reasons set forth in the Appeal Brief.

iv) Claims 94, 95, 98, 100, 103 And 106-108

Claims 94, 95, 98, 100, 103, and 106 are rejected as being unpatentable over Crowther in view of Bart in Section E-31 of the Final Office Action for the same reasons as set forth for claim 93. This rejection is repeated without comment in Section R5 of the Examiner's Answer. As stated in the Appeal Brief, claims 94, 95, 98, 100, 103, and 106-108 are patentable over Crowther in view of Bart for the reasons set forth with respect to claim 93 and for the additional reasons set forth with respect to claims 188-191, 193 and 194-196.

G. Rejection Based On Millar And Marti

Claims 84, 85, 86, 87, 183-191 and 193-196 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over British Patent 1 370 535 naming as inventors Ian David Balfour Millar *et al.* ("Millar") in view of U.S. Patent No. 4,290,062 issued to Bernard Marti *et al.* ("Marti"). Appellants maintain that these claims are patentable over Millar in view of Marti for the reasons set forth in Section 5. G. of the Argument presented in the Appeal Brief. The Examiner fails to properly identify the differences between the rejected claims and the teachings of Millar.

i) Claim 84

In Section E-19 of the Final Office Action, claim 84 is rejected as being unpatentable over Millar in view of Marti. Section R14 of the Examiner's Answer repeats this rejection. Appellants maintain that claim 84 is patentable over Millar in view of Marti for the reasons set forth in the Appeal Brief.

The Examiner's response to the Appeal Brief is that:

It is the examiner's position that the "steps" that are positively recited by claim 84 are met by the conventional teletext transmission system shown by Millar et al. alone, whereas the functional descriptions of the receiver side processing are obvious, if not implicit, in the conventional receiver side circuitry that is broadly disclosed/illustrated by Millar et al., as is evidenced via the more detailed showing of such conventional structure offered by Marti et al.

(Examiner's Answer, p. 38.) However, the Examiner's position is based wholly on the unreasonable interpretations of the terms "locally generated," "user specific data" and "organize." The secondary reference to Marti is applied to show details of teletext decoder operation not explicitly shown in Millar. The teachings of the Marti reference are not applied to suggest that the teachings of Millar be modified to use an organized signal to instruct a receiver station to generate a locally generated image based on user specific data as disclosed in applicants' specification and as claimed by claim 84. The errors in the Examiner's reasoning are equally applicable to the teachings of either Millar or Marti.

For the reasons set forth in Section 3 above and in the Appeal Brief, Millar does not show or suggest generating or outputting a locally generated image. Millar does not show or suggest user specific data on which a locally generated image is based. Millar does not show or suggest a first discrete signal including information for organizing with information included in a second discrete signal to provide an organized signal. Appellants respectfully request that the rejection of claim 84 as being unpatentable over Millar in view of Marti be reversed for at least this reason.

ii) Claims 85, 87 And 183-186

Claims 85, 87 and 183-186 depend from claim 84. In Section E-20 of the Final Office Action, these claims are rejected as being unpatentable over Millar in view of Marti for the same reason as claim 84. This rejection is repeated verbatim in Section R15 of the Examiner's Answer. Accordingly, appellants maintain that these claims are patentable over Millar and Marti for at least the reasons set forth in the Appeal Brief.

a) Claim 183

Claim 183 sets forth receiving a first control discrete signal and a second control discrete signal at the transmitter station and organizing information included in the first control discrete signal with information included in the second control discrete signal to provide a control signal. The step of transmitting is based on the control signal. The Examiner asserts that various discrete control signals are necessarily received and organized by the computer 52 of Millar. (Examiner's Answer, p. 38.) There is no such suggestion in Millar. The Examiner's assertion appears to be that all signals are necessarily organized. Such an assertion gives no meaning to the term "organizing" as this term is used in the claims. Accordingly, the Examiner's interpretation of claim 183 is unreasonably broad.

b) Claims 184 and 185

With respect to claims 184 and 185, the Examiner asserts that teletext data inherently represent instructions for locally generating and outputting corresponding teletext images at the receiver locations. Appellants submit that teletext does not inherently generate an image based on user specific data as these terms are used in the claims. Appellants also note that it is not inherent that teletext data must be an organized signal as is the signal recited in claims 184 and 185.

c) Claim 186

None of the Final Office Action, the Advisory Action, or the Examiner's Answer addresses the limitations of claim 186. The Examiner thus fails set forth a proper *prima facie* case of obviousness against claim 186.

iii) Claim 187

In Section E-21 of the Final Office Action, claim 187 is rejected as being unpatentable over Millar in view of Marti for the same reason as claim 84. Section R16 of the Examiner's Answer is a verbatim copy of the rejection set forth in the Final Office Action. Accordingly, appellants maintain that the claim 187 is patentable over Millar in view of Marti for the reasons set forth in the Appeal Brief.

iv) Claims 188-191 And 193-196

Claims 188-191 and 193-196 depend from claim 187. In Sections E-21 and E-22 of the Final Office Action, claims 188-191 and 193-196 are rejected as being unpatentable over Millar in view of Marti for the same reason as claim 187. Sections R16 and R17 of the Examiner's Answer are verbatim copies of the rejections set forth in Sections E-21 and E-22 of the Final Office Action. Accordingly, claims 188-191 and 193-196 are patentable over Millar in view of Marti for at least the reasons set forth in the Appeal Brief.

v) Claim 80

In Section E-23 of the Final Office Action, claim 80 is rejected as being unpatentable over Millar in view of Marti for the same reason as claim 84. Section R18 of the Examiner's Answer repeats this rejection practically verbatim. Accordingly, appellants maintain that the claim 80 is patentable over Millar in view of Marti for the reasons set forth in the Appeal Brief.

vi) Claim 81

Claim 81 is rejected in Section E-23 of the Final Office Action as being unpatentable over Millar in view of Marti for the same reason as claim 80. Section R18 of the Examiner's

Answer repeats this rejection practically verbatim. Accordingly, appellants maintain that the claim 81 is patentable over Millar in view of Marti for the reasons set forth in the Appeal Brief.

H. Rejection Based On Diederich, Germany And Chambers

Claims 80 and 81 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the three-reference combination of German Patent 23 56 969 to Warner Diederich (“Diederich”) in view of British Patent 959,274 listing as inventor Leslie Walter Germany (“Germany”) and further in view of “CEEFAX - The Generation, Distribution and Transmission of a National Teletext Service” by J. P. Chambers (“Chambers”). Appellants request that the rejection of claims 80 and 81 be reversed for the reasons set forth in Section 5. H. of the Argument presented in the Appeal Brief. The Examiner fails to properly identify the differences between the rejected claims and the teachings of Diederich.

i) Claim 80

In Section E-32 of the Final Office Action, claim 80 is rejected as being unpatentable over Diederich and Germany in view of Chambers. This rejection is repeated in Section R19 of the Examiner’s Answer. In the Appeal Brief, appellants point out that there is no suggestion that the CEEFAX system of Chambers, relied upon show an instruct signal, includes an instruct signal operative at a receiver station to generate or output a locally generated portion of a video presentation based on data specific to a user of the receiver station for display coordinated with the video. In response, the Examiner clarifies that Chambers shows a national teletext service that is passed onto households by a local affiliate. (Examiner’s Answer, p. 43.) The Examiner’s argument does not address appellants’ arguments that teletext data is not an instruct signal operative at a receiver station to generate or output a locally generated portion of a video presentation based on data specific to a user of the receiver station for display coordinated with video.

Also in the Appeal Brief, appellants argue that there is no suggestion that the embedded cue signals of Diederich or Germany are used to control the transmission of an instruct signal as set forth by claim 80. Further, appellants argued that the Examiner provides insufficient motivation to combine the teachings of Diederich or Germany with the teachings of Chambers. The Examiner's Answer does not address these contentions.

Appellants respectfully submit that claim 80 is patentable over the three-reference combination of Diederich and Germany in view of Chambers for the reasons set forth in the Appeal Brief.

ii) Claim 81

In Section E-33 of the Final Office Action, claim 81 is rejected as being unpatentable over the three-reference combination of Diederich and Germany in view of Chambers for the same reason as claim 80. This rejection is repeated in Section R20 of the Examiner's Answer. Appellants maintain that claim 80 is patentable over the three-reference combination of Diederich and Germany in view of Chambers for the reasons set forth in the Appeal Brief.

I. Rejections Based On Young, Tunmann And Bart

In Section E-37 of the Final Office Action, claim 80 is rejected under 35 U.S.C. § 103(a) as being unpatentable over conventional TV system configurations as shown in the three-reference combination of "The Automation of Small Television Stations" by George Young *et al.* ("Young"), "Microprocessor for CATV Systems" by E.O. Tunmann *et al.* ("Tunmann") and Bart. Section R21 of the Examiner's Answer repeats this rejection. The Examiner fails to point out where each of the specific limitations recited in claim 80 is found in the prior art relied upon in the rejection.

Appellants maintain that for the reasons set forth in Section 5. I. of the Argument presented in the Appeal Brief, this rejection is improper. Appellants note that the Final Office Action included a practically identical rejection in which the CBS/CCETT North American Broadcast Teletext Specification was substituted in place of Bart. The Appeal Brief addressed

these two rejections in tandem. However, the rejections based on the CBS/CCETT Specification have been withdrawn (Examiner's Answer, p. 4). The Examiner's Answer does not address appellants' contentions in the context of the rejection based on Bart. Accordingly, appellants maintain that the rejection is improper for the reasons set forth in the Appeal Brief. Appellants note that Bart is used as a teletext reference to show *an instruct signal which is operative at said at least one receiver station to instruct said at least one receiver to at least one of generate and output a locally generated portion of said video presentation based on data specific to a user of said receiver station for display coordinated with said video*. The Examiner relies on unreasonably broad interpretations of "locally generated portion" and "data specific to a user" to assert that the teletext data processed by Bart shows or suggests an instruct signal as recited by claim 80. Appellants request that, for the reasons set forth in the Appeal Brief, the rejection of claim 80 as being unpatentable over conventional TV system configurations as shown in the three-reference combination of Young, Tunmann and Bart be reversed.

6. Response To Double Patenting Rejection

In Section E-43 of the Final Office Action, the Examiner rejects claims 56-58, 60-63, 65-74, 89-91, 93-95, 98, 100, 102, and 187-197 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 9-13 of U.S. Patent No. 4,694,490 (the "490 patent"). This rejection is repeated practically verbatim in the Section R33 of the Examiner's Answer. The Examiner's Answer notes the claim support provided in the Summary Of The Claimed Subject Matter presented in the Appeal Brief. As the Examiner's Answer does not address appellants' contentions, appellants request that the double patenting rejection be reversed for the reasons set forth in the Appeal Brief.

The examiner's answer is required to include, under appropriate headings, in the order indicated, the following items:

....

(9) *Grounds of Rejection*. For each ground of rejection maintained by the examiner . . . , an explanation of the ground of rejection.

....

(f) For each rejection, other than those referred to in paragraphs (a) to (e) of this section, the examiner's answer must specifically explain the basis for the particular rejection.

M.P.E.P. § 1207.02. The only basis set forth by the Examiner for these rejections finds no support in the judicially created doctrine of obviousness-type double patenting.

The Examiner argues that there is no difference between the rejected claims and the claims 9-13 of the '490 patent because they derive support from the same section of the earliest filed common parent specification. Appellants set forth the reasons why the Examiner's argument lacks both legal and factual bases in the Appeal Brief. However, appellants note that they first identified several exemplary differences between the inventions defined by the rejected claims and claims 9-13 of the '490 patent in the Response to the Final Office Action filed September 20, 2004. These examples, repeated in the appellants' Appeal Brief, clearly demonstrate that the inventions defined in the pending claims are not merely obvious variations of the inventions claimed in claims 9-13 of the '490 patent. Yet, the Examiner has not addressed these differences. The Advisory Action was silent regarding the double patenting rejection. The Examiner's Answer simply repeats the Final Office Action. The Examiner has made no attempt to provide reasons why a person of ordinary skill in the art would conclude that the invention defined in the rejected claims would have been an obvious variation of the invention defined by claims 9-13 of the '490 patent. Accordingly, the Examiner has failed to set forth a proper obviousness-type double patenting rejection of the pending claims for the reasons set forth in the Appeal Brief.

7. Ancillary Issues

The Examiner's Answer includes as Section II of the Grounds of Rejection a summary of the Examiner's understanding of the operation of some generalized teletext system. The Examiner's summary is not prior art and does not form the basis of any rejection. Accordingly, appellants do not address the Examiner's position directly. Appellants have addressed the

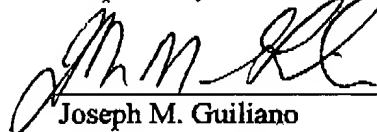
Examiner's understanding of teletext when it is asserted in a proper rejection and supported with actual prior art references.

At page 19 of the Examiner's Answer, the Examiner repeats verbatim a question raised in the Final Office Action regarding the term "with" in claims 65, 84, 93 and 187. The Examiner's discussion of the term "with" in these claims does not form the basis of a rejection. As the question does not form the basis for a ground of rejection to be reviewed on appeal, appellants did not address the question in their Appeal Brief. The question is further rendered moot as appellants do not object to the interpretation of the term "with" adopted by the Examiner in the Final Office Action. Accordingly, appellants can find no reason why this section was repeated in the Examiner's Answer.

8. Conclusion

The grounds of rejection asserted by the Examiner are primarily based on unreasonably broad interpretations of the claim terms. The Examiner acknowledges distinctions between appellants' disclosed invention and the applied teletext references. However, the Examiner asserts that the disputed claim terms do not capture the acknowledged distinctions. Appellants respectfully submit that, when the claim language is given a reasonable interpretation, the applied art does not anticipate or suggest the invention defined by the pending claims. In accordance with the foregoing, it is respectfully submitted that the Examiner has failed to establish that the claims of the instant application are unpatentable under 35 U.S.C. §§ 102, 103(a), or 112 or under the doctrine of obviousness-type double patenting. Accordingly, appellants respectfully request that the Examiner's rejections be reversed and the application be returned to the Examiner for allowance.

Respectfully submitted,



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